SHAPE AND SPACE

Interpreting a Map of the School Grounds

Learning focus

- Interpret the map of a familiar location
- Describe location of objects using grid references
- Use cardinal directions to describe location and direction

Key vocabulary

- Cardinal directions
- Intercardinal directions
- Horizontal
- Vertical
- Perpendicular
- Right angle

Resources

- Laminated grid maps of the school grounds

Activity

In pairs/small groups, children should explore a grid map of the school grounds. This can be created by overlaying a grid on a standard map or google map photo of the school.

Ask questions to help elicit children's thinking about the map.

Can you find the main entrance on the map? What grid reference would you give for this?
What direction is the front door facing? How do you know?
Where is our classroom on the map? What direction do our windows face? How do you know?

Engage in activities where the children locate objects on the school grounds and mark them on their maps. For example, mark with an X a number of objects on the map (each in a different square). In pairs/small groups, the children must locate the object and take a photo or write down what the object is.

Teaching point

The four cardinal directions alone may not be accurate enough to describe directions. We can use the intercardinal directions to be more accurate (northwest, northeast, southwest, southeast). For the purposes of this activity, approximations are appropriate. Depending on the class level and their familiarity with mapping, grid references can be labelled in a number of ways. Please note for each of these activities the grid references describe a square space on the maps.

Use the grid maps to track and describe basic paths between various points of interest. These can be enacted and then recorded on the map.

If you were going from the gate to the front door, what squares would you go through on the grid?
What turns would you make?

Teaching point

When describing turns, it is necessary to describe both the amount of turn, for example, quarter turn or 90 degrees, and the direction of turn (clockwise, anticlockwise, to the north etc.). The task can be differentiated by varying expectations around the formality and precision of these descriptions.

Taking ideas further

This activity can be extended by exploring the standard mapping conventions of Ordnance Survey maps, such as standard mapping symbols, four-figure grid references and six-figure grid references.

Assessment opportunities

Are the children able to:

- Use cardinal directions to describe position and orientation
- Identify location using grid references
- Explain and justify their solutions